

Edgar Snodgrass

THE ANCIENT AND NOBLE SCIENCE AND ART OF ARCHERY.

By CHARLES H. MILES, L.R.C.P.Lond., etc.



Published by the
MEDICAL TIMES PUBLISHING Co., Basinghall Street, E.C.

THE SECRET OF THE MOUNTAIN

THE MOUNTAIN

THE MOUNTAIN

FILE



22200070238



This little Booklet
is respectfully dedicated
to my scholarly and esteemed friend,
Thomas Parker Greenwood, M.D., B.Sc

[1911-?]

PREFACE.

CENTURIES before the time when the son of Hagar dwelt in the wilderness, and became an archer (Genesis xxi., verse 20), down to the time of Robin Hood, who was the greatest archer the world has ever known, the bow has ever been the chief weapon of all nations.

The huge six-foot bow, with arrows a cloth yard long, were the chief weapons of the archers of the twelfth century.

It is said that Robin Hood could send a cloth yard shaft nearly a mile. Arrows were often used as a means of conveying messages from one person to another, by fastening a letter to the shaft, just behind the arrow-head. If one compares the tastefully dressed and fully equipped archer of the present day (young man or maiden) with those equipped and dressed for other sports and amusements, I am sure one's choice will be in favour of the archer, as grace, dignity, and charm characterizes the latter.

In conclusion, I wish to acknowledge my indebtedness to many authors, also to my friend W. Whittaker (M.P.S.), for his kindness in taking the photographs which illustrate my article.

2680661

WELLCOME INSTITUTE LIBRARY	
Coll.	welMOMec
Call	Pam
No.	QT 255
	191*
	M 64a

THE ANCIENT AND NOBLE SCIENCE AND ART OF ARCHERY AS A MEANS OF FAVOURING HEALTHY MENTAL AND PHYSICAL DEVELOP- MENT.

By CHARLES H. MILES, L.R.C.P.Lond., L.S.A.-
Lond.; Member of the Medical Graduates' Col-
lege and Polyclinic, London; late of the Imperial
Yeomanry; Cavalry Prize Shot; Prize Sword-
man and Medallist for Rifle Shooting, etc.

INTRODUCTION.

It may be thought by some that in modern England we are apt to spend too much time in games and athletics, to the detriment of our standing as a nation. There certainly is a tendency to this, although all will admit that the stress of our modern civilisation, and the strain of life to-day, require some method of balancing by recreation or pastime. It seems strange that the ancient pastime of archery has not received sufficient recognition in this respect, for of all noble, refined, and scientific pastimes, archery, to my mind, ranks first.

The old adage says that comparisons are odious, therefore-I will make no comparisons between archery and other sports, but I will say that this ancient pastime has its advantages. It has no brutalising aspect, nor is it effeminate. It is not

dangerous, with proper care, nor is it nonsensical. It appeals to the scientific mind from its difficulty and its accuracy, and then leads to the formation of valuable traits of character, especially the attributes of concentration of mind and decision. The mechanical principles involved in the dispatch and flight and destination of the projectile—the arrow, just as in the game of golf, where a spheroid projectile is used—are full of interest. In short, it is a recreation of great practical value in assisting to improve the mental and physical well-being of those who choose it as a general amusement.

Any person from nine years of age to ninety can safely indulge in this gentle pastime. Unlike many games, it does not call for any change of dress.

As a means of healthy exercise, archery, indeed, stands almost unrivalled, for we know that life without health is not worth living, and health cannot (in the majority of cases) be maintained without some sort of physical exercise.

1. In the growing youth, or the young adult, such an amusement as archery favours healthy development, and improves the figure and deportment.

2. In manhood, and in womanhood, an exercise like archery assists in preserving the condition of health, the upright figure, and the graceful bearing.

3. In old age, and in delicate persons, this exercise contributes in prolonging health and happiness in those where more violent exercise would be unsuitable and contra-indicated.

HISTORICAL OUTLINE OF ARCHERY.

The antiquity of archery, together with its glorious records of the past, should lead to its ready adoption as a physical recreation by all those interested in their country's history.

Hughes says:—

“ Stout arm, strong bow, and steady eye.
Union, true heart, and courtesy.”

Roger Ascham, Tutor to Queen Elizabeth, in 1544, says of archery:—

“ It is an exercise most holesome for the body, a pastime most honeste for the minde, and as I am able to prove myselfe, of all other most fitte, and agreeable with learnynge, and learned men.”

Allan Ramsay says in praise of archery:—

“ Sound, sound the music, sound it,
Let hills and dales rebound it,
In praise of Archery;
Used as a game it pleases,
The mind to joy it raises,
And throws off all diseases
Of lazy luxury.”

The bow is as old as the hills. Ten thousand years ago the bow was used in war and the chase. The antiquity of archery should lead to its adoption as a pastime and amusement.

Four thousand years before Christ the bow and the sword were the chief weapons of the soldiers of the mighty Egyptian and Babylonian empires, and a thousand years later we find the troops of that great Chinese empire which reached

far into the east of Asia armed with the same weapons. Some time later we read of the Assyrians being experts with the bow. See Isaiah, Chapter xxxvii., verse 33:—"Therefore, said the Lord, concerning the King of Assyria, he shall not come into the city or shoot an arrow there." During the existence of that mighty kingdom founded by Saul and David, we read a great deal about the bow. Take for instance Chronicles I., fifth chapter, verse 18:—"The sons of Ruben and the Gadites, and half the tribe of Manasseh of valiant men, men able to bear buckler and sword, and to shoot with the bow."

Again, take Kings II., verse 24:—

"And Jehu drew a bow with his full strength and smote Jehoram between his arms, and the arrow went out at his heart, and he sunk down into his chariot."

Later on in history, about 1,000 years B.C., we come to the struggle between Agamemnon, King of Mycenæ, and the King of Troy, where we find the contending armies rich in archers, as the following lines will prove:—

"For in the rear the Locrian archers lie,
Whose stones and arrows intercept the sky."

Or,

"Greece sees no hope. Troy's great defender slain.

All spring to seize him; storms of arrows fly."

Or,

"Those by Apollo's silver bow were slain,
These Cynthia's arrows stretched upon the plain."

Or,

“ Darts shower on darts,
Now flights of arrows, bounding from the
string.”

Homer tells us how Pandarius' bow was constructed, and also how the deadly arrow wounds were treated, as for instance, Homer's *Iliad*, Book IV., 214, 220.

“ Where to the steely point the reed was joined
The shaft he drew but left the head behind,
Strait the broad belt with gay embroidery
graced

He loosed, the corselet from his breast un-
braced,

Then sucked the blood and sovereign balm in-
fused,

Which Chiron gave and Æsculapius used.”

Passing on in this outline of archery, we read how Ulysses returned from his wanderings, and slew his enemies by his skill in the use of the bow. After Troy we come to the Athenian empire, and find in the history of her wars her archers did great execution with their bows. A little later, in the time of the great Persian dynasty, the arms of the Persian soldier were the sword and the bow.

Coming forward in the history of the world, we read of King Darius, how he sent a large army against the Athenians and Platæans, and how that mighty army was utterly routed by the archers of the enemy. Again, when 300 Spartans fell fighting in the pass of Thermopylæ under Leonidas, nearly the whole force was slain by

the arrows of the enemy. Alexander the "Great," in his conquests of Asia, while passing through the great mountain passes, was harassed greatly by the arrows of the foe. Following on we find Hannibal, the great Carthaginian General, passing through the Alps to the siege of Rome, with companies of archers in his army, and even his officers using the bow as a weapon and for the chase.

After the fall of Carthage the Romans founded the greatest empire the world had ever known, and her army became the largest in the world.

The archers in the Roman army came from Crete, and the Balearic Islands, and were noted for their skill with the bow.

Report states that on one occasion a cohort of 300 to 360 men engaged in battle with Pompey's legion, and that nearly every man in the cohort was pierced by an arrow, and that 130,000 arrows were found afterwards in the fort where the engagement occurred.

Passing on to English history, we come to the time when King Alfred was found mending his bow, and neglecting the cakes. Continuing onwards, we come to the invasion of England by the Normans, where King Harold is slain on the field of Senlac by an arrow, and later on King Rufus is accidentally killed by an arrow in the New Forest, and still later on King Richard the Lion-hearted is dangerously wounded by an arrow and dies of his wounds.

What an instrument the bow has been for good and evil?

About this time—Richard the First—there lived in Sherwood Forest that noble and romantic outlaw, Robin Hood, who with a picked army of skilful archers defied both the barons and the King.

It was about this period that the long bow attained its pre-eminence as a weapon of war. At this time shooting at the butts was compulsory, and children were trained to stand at attention with the bow arm fully and rigidly extended for a certain time each day in order to educate those muscles chiefly concerned in using the weapon.

By these means the English bowmen became the pride of the nation, and no country could compare with them. All battles were now decided by the superior skill of the archers—Cressy, Agincourt, and Poitiers.

The matchless skill of these English archers seems almost incredible. It is stated on good authority that these bowmen could draw and discharge an arrow twelve times in a minute, and hit a mark the size of a man eleven times out of twelve at a distance of 250 yards.

The historian tells us in his description of the battle of Cressy that the English archers stepped forth one pace as they drew the bow-string to the ear and let their arrows fly so thickly and wholly that it seemed as snow, and that in the battle of Shrewsbury, the flower of England's feudal infantry, her archers, poured in their arrows thick as hail upon their foes, who fell in hundreds, slain by the deadly English shafts.

SCIENCE OF ARCHERY.

Archery is a great science, for it requires educated sense, and long continued practice, in order to become an expert. The rifleman has mechanical aids connected with his rifle, such as foresight, and backsight, and his weapon has been correctly sighted, and thoroughly tested, so that if the distance is known and the aim is true the bullet must as a certainty strike the mark.

The archer, on the other hand, has no mechanical aids to his weapon. He must depend entirely upon his judgment, experience, steadiness of his nerves, muscular tone, and harmonious co-ordination of his muscles.

There is no flat space in which the arrow when discharged from the bow flies perfectly parallel with the earth's surface. Like other projectiles it describes a curve known as a parabola, therefore the archer must estimate the elevation required by his skill, experience, and judgment, and at the same time he must make allowance for side winds and other details.

Now, archery is an amusement that cannot be indulged in straight away like most pastimes. The archer must be taught carefully the science and art of the subject before he is capable of taking part in the practical part of the exercise.

The necessary equipments are bow, quiver, arrows, gloves, arm guard, grease cup, tassel, and shoulder belt.

With archery the question of expense is a serious consideration, but at the same time it must be remembered that no recreation can be indulged in without some initial outlay.

PRACTICAL ARCHERY.

My first photograph represents the archer standing at ease.



ARCHER STANDING AT EASE.

Now one might ask what mental and physical benefits are likely to occur at this stage? Well, taking mental benefit first:—

1. She has been carefully instructed in the science and art of archery. She feels now that she is fully armed and equipped with a weapon by which her forefathers slew their enemies, and obtained their daily food, and upon which the glory and honour of England was frequently dependent.
2. She is charmed, and interested in the glorious history of the past relating to archery.
3. She is enthusiastic, and enamoured with the military spirit and principles of the amusement, and physically she derives benefit by having to walk some distance into the open country, as archery cannot be carried on in one's own back yard.
4. She has been trained to march, and participate in drill and manœuvres, and she has been disciplined.

My second photograph illustrates the archer stringing the bow.

This operation requires the exercise of a certain amount of mental and physical exertion. Stringing the bow to the new beginner is often very tedious and tiresome, but with perseverance and practice the art is soon acquired, and once accomplished the knack is known. The learner should be encouraged in this act by reminding her

of Ulysses, how he strung his bow which no other man could string, and shot down his enemies.

The process of stringing the bow, then, results



ARCHER STRINGING THE BOW.

in a certain amount of healthy mental and physical exertion. Nearly all the important muscles of the arms, many of the back and spine, and the majority of those of the lower limbs are brought into play.

In this attitude the left foot is inverted, the left arm extended pulls the handle of the bow towards the body, while the right arm and wrist directs the string into the notch.

My next photograph represents the archer in the act of fitting the arrow to the string. This is a delicate and important movement, for it means that the bow is to be properly held, and the arrow drawn from the quiver in a right and scientific way. The bow at this period can be held so that it covers the left half of the body as the sword does in the left engage. The arrow is brought out by the middle, carried under the string and over the bow, the left forefinger is then thrown over the arrow, and the right hand is passed down to the nock, and the cock feather is found and placed outwards. The arrow, being fitted to the string, the bow is now raised by a circular sweeping movement to the perpendicular and thrust out to the full extent of the arm.

Some archers hold the bow horizontal, with the string upwards, during the fitting of the arrow to the string.

My next photograph shows the archer with the arrow drawn to the head.

During this operation it is necessary that the left arm should be as firm and rigid as the bough of an oak tree, or the arrow will become unsteady

and the aim uncertain. In this position the figure is shown to the very best possible advantage, and it is acknowledged by the highest authority on attitude and deportment that the human form



ARCHER FITTING THE ARROW TO THE STRING.

cannot be shown off to better effect than that of the archer when drawing the long bow. Strength, grace, and dignity are all displayed in this act.

Again, this action not only educates the eye, the hand, and the muscles, and affords good mental training, but by the harmonious co-ordination of nearly every muscle in the body it necessitates deep breathing, and an easy and upright posture, which will do more to develop flat chest, prevent round shoulders, and spinal curvatures, than any number of exercises advised by the physical culture expert.

The principal muscles brought into action in the correct position of drawing the long bow would be as follows:—

Extensor Carpi Radialis.	Extensor Digitorum Pedis.
Extensor Carpi Ulnaris.	Peroneus Longus and Brevis.
Extensor Communis Digitorum.	Tibialis Anticus.
Extensor Pollicis.	Tendo Achillis, and all its muscles.
Flexor Sublimus Digitorum.	Gracilis.
Flexor Longus Pollicis.	Adductor Longus and Brevis.
Flexor Carpi Ulnaris.	Serratus Magnus.
Flexor Carpi Radialis	Rectus Abdominis.
Pronator Radii Teres.	External Rectus.
Supinator Radii Longus.	Trapezius.
Triceps.	Latissimus Dorsi.
Brachialis Anticus.	Teres Major.
Biceps.	Teres Minor.
Pectoralis Major.	Infra Spinatus.
Deltoid.	Gluteus Maximus.
Sterno-Cleido Mastoid.	Pectineus, etc.



ARCHER DRAWING THE ARROW TO THE HEAD.

I might mention that Hugh Latimer, who was Bishop of Worcester, was a strong advocate of the learning of archery by the youths of his day



ARCHER NOTING THE RESULT OF THE SHOT.



MISS M. FANCUTT, WINNER OF THE FIRST PRIZE IN THE
ARCHERY TOURNAMENT AT STANTONBURY, MAY 27th 1912.

as a means of the country's defence. Now the defence of the country is no longer dependent upon her archers, but the bow still has its practical value, for I am certain that if this exercise was more generally taken up by not only the youths and maidens, but men and women of this country, it would result in great practical value to all, so that the physical culture experts would not be in such great demand as they are at the present time!

The last photograph represents the archer noting the effect of her shot, and the pleased expression depicted upon her face would lead one to suppose that she was satisfied with the result. In this way habits of observation and reflexion are encouraged.

To direct the arrow so as to strike the target has required the trained eye, the stout arm, the steady hand, the educated muscles, the quiet nerves, in fact the concentrated harmonious co-ordination of all these mental and physical powers to produce this desirable result.

I might conclude my paper in favour of archery as a mental and physical recreation by quoting the words of Dryden:—

“ By chase our long-lived fathers earned their food;

Toil strung the nerves, and purified the blood;

But we, their sons, a pampered race of men,

Are dwindled down to three-score years and ten.

Better to sweat in fields for health embought,

Than fee the doctor for a nauseous draught—

The wise for cure on exercise depend:

God never made his work for men to mend.”



